#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of	)
WERNER et al.	)
Application No. 10/072 720	) Art Unit: 2821
Application No. 10/072,739	) Examiner: Ho, Tan
Filing Date: February 8, 2002	)
	) Confirmation No.: 2986
For: <b>SYSTEM AND METHOD FOR</b>	)
GENERATING A GENETICALLY	)
ENGINEERED CONFIGURATION FOR	)
AT LEAST ONE ANTENNA AND/OR	)
FREQUENCY SELECTIVE SURFACE	)

# PETITION TO WITHDRAW HOLDING OF ERRONEOUS ABANDONMENT UNDER 37 C.F.R. § 1.181

Mail Stop PETITION Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 NEEDLE & ROSENBERG, P.C.

Customer Number 23859

August 28, 2007

Sir:

Applicants petition that the abandonment set forth in the notice mailed on July 11, 2006 be withdrawn as being erroneous.

Submitted herewith are copies of the following documents as evidence of the timely response to the December 29, 2005 Office Communication:

- 1. Office Communication dated December 29, 2005;
- 2. Amendment in Response to Office Communication mailed June 29, 2006;
- 3. Three months Extension of Time fee; and

ATTORNEY DOCKET NO. 19264.0007U2 Application No. 10/072,739

4. Itemized return receipt postcard identifying the papers filed and showing the U.S.

PTO receipt stamp dated receipt.

Inasmuch as the Amendment for this application was timely submitted and paid on June 29, 2006, it is respectfully requested that the Notice of Abandonment be withdrawn.

No fee is believed to be due in connection with this Petition per M.P.E.P. § 711.03(c) I (February 2003). However, if a fee is due, the Commissioner is authorized to charge any such fee or credit any overpayment to Deposit Account No. 14-0629.

Respectfully submitted,

NEEDLE & ROSENBERG, P.C.

Kean V. DeCarlo

Registration No. 39,956

NEEDLE & ROSENBERG, P.C.

Customer Number 23859

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### UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION N	10.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO. CONFIRMATION NO.	
10/072,739		02/08/2002	Douglas H. Werner	19264.0007U2 2986	
23859	7590	07/11/2006		EXAMINER	
		ENBERG, P.C.		но, 7	ΓAN
SUITE 10 999 PEA	000 CHTREE S	STREET		ART UNIT	PAPER NUMBER
ATLANT	TA, GA 3	10309-3915		2821	
				DATE MAILED: 07/11/2000	5

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
	10/072,739	WERNER ET AL.	
Notice of Abandonment	Examiner	Art Unit	
	Tan Ho	2821	
The MAILING DATE of this communic			
This application is abandoned in view of:			
<ol> <li>Applicant's failure to timely file a proper reply to         <ul> <li>(a)  A reply was received on (with a Certiperiod for reply (including a total extension of the content of the conte</li></ul></li></ol>	ficate of Mailing or Transmission dated filme of month(s)) which expire	d), which is after the expiration of the ed on	
(b) A proposed reply was received on, be			ion.
(A proper reply under 37 CFR 1.113 to a final application in condition for allowance; (2) a t Continued Examination (RCE) in compliance	imely filed Notice of Appeal (with appe		
(c) A reply was received on but it does n final rejection. See 37 CFR 1.85(a) and 1.1		fide attempt at a proper reply, to the non-	
(d) ⊠ No reply has been received.			
Applicant's failure to timely pay the required issifrom the mailing date of the Notice of Allowance		e, within the statutory period of three mont	ths
(a) The issue fee and publication fee, if application fee, if application fee, if application of the standard (PTOL-85).		Certificate of Mailing or Transmission da e fee (and publication fee) set in the Notice	
(b) The submitted fee of \$ is insufficient.	A balance of \$ is due.		
The issue fee required by 37 CFR 1.18 is \$	The publication fee, if require	ed by 37 CFR 1.18(d), is \$	
(c) ☐ The issue fee and publication fee, if applicab	le, has not been received.		
<ol> <li>Applicant's failure to timely file corrected drawing Allowability (PTO-37).</li> </ol>	gs as required by, and within the three	-month period set in, the Notice of	
<ul> <li>(a) Proposed corrected drawings were received after the expiration of the period for reply.</li> </ul>	on (with a Certificate of Mailing	g or Transmission dated), which is	
(b) \( \sum \) No corrected drawings have been received.			
The letter of express abandonment which is signature the applicants.	ned by the attorney or agent of record	, the assignee of the entire interest, or all o	of
5. The letter of express abandonment which is sign 1.34(a)) upon the filing of a continuing application		a representative capacity under 37 CFR	
6. The decision by the Board of Patent Appeals and of the decision has expired and there are no allo		because the period for seeking court revi	iew
7. The reason(s) below:			
		Canlo	
		TAN HO	
		PRIMARY EXAMINER	
Petitions to revive under 37 CFR 1.137(a) or (b), or requests minimize any negative effects on patent term.	to withdraw the holding of abandonment	under 37 CFR 1.181, should be promptly filed to	)
.S. Patent and Trademark Office TOL-1432 (Rev. 04-01)	Notice of Abandonment	Part of Paper No. 2006071	10

### ATTORNEY DOCKET NO. 19264.0007U2 PATENT

JUL 0 3 2006

#### THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of		)		
Werner, et al.		)	Group Art Unit:	2821
Serial No.:	10/072,739	)	Examiner:	Ho, Tan
Filed:	February 8, 2002	)	Confirmation No.	2986
For:	"System and Method for Generating a Genetically Engineered Configuration for At Least One Antenna and/or Frequency Selective Surface"	) ) )		

#### **AMENDMENT**

MAIL STOP AMENDMENT Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 NEEDLE & ROSENBERG, P.C. Customer Number 23859

June 29, 2006

Sir:

In response to the December 29, 2005 Office Action that issued in the above-identified patent application, and in accordance with the revised amendment practice outlined in revised 37 CFR 1.121, please amend the application as outlined below:

Amendments to the Claims are reflected in the listing of claims that begins on Page 2 of this paper.

Remarks begin on Page 14 of this paper.

07/06/2006 FMETEKI1 00000067 10072739

02 FC:1201

2600.00 OP

#### In the Claims:

1. (Currently Amended) A method for generating a configuration of elements for at least one antenna, comprising the steps of:

selecting a simple antenna configuration including at least one antenna element; applying a genetic algorithm to the simple configuration to generate an antenna configuration optimized for antenna characteristics; and

creating a pattern for a frequency selective surface for improving radiation characteristics of the antenna.

- 2. (Original) The method of claim 1, further comprising a step of analyzing radiation characteristics of the simple antenna configuration, wherein the radiation characteristics are used in the step of applying a genetic algorithm to generate the antenna configuration optimized for antenna characteristics.
- 3. (Currently Amended) The method of claim 2, wherein the step of applying [[a]] the genetic algorithm includes generating candidate antenna configurations, the step of analyzing radiation characteristics includes analyzing radiation characteristics of the candidate antenna configurations, and the steps of applying [[a]] the genetic algorithm and analyzing radiation characteristics are repeated until the step of applying a genetic algorithm generates an optimal antenna configuration.
- 4. (Original) The method of claim 1, wherein the antenna characteristics include at least one of voltage standing wave ratio, gain, size, bandwidth, radiation pattern, and impedance.
- 5. (Currently Amended) The method of claim 1, wherein the step of applying [[a]] the genetic algorithm optimizes at least one of geometry of elements, height of the antenna above a ground plane, and length of the antenna.

- 6. (Currently Amended) The method of claim 1, wherein the step of further comprising applying the genetic algorithm to generate generates at least one of optimized load placement and optimized load values for the antenna configuration.
- 7. (Currently Amended) The method of claim 1, wherein the step of further comprising applying [[a]] the genetic algorithm to generate generates optimized design parameters of a matching network or balun to be connected to the antenna.
- 8. (Currently Amended) The method of claim 1, wherein the step of selecting [[a]] the simple antenna configuration comprises randomly selecting antenna elements.
- 9. (Original) The method of claim 8, further comprising selecting elements that connect to the randomly selected elements to produce a stochastic configuration to which the genetic algorithm is applied.
- 10. (Currently Amended) The method of claim 1, wherein the step of applying [[a]] the genetic algorithm includes optimizing each element of the antenna independently.
- 11. (Currently Amended) The method of claim 1, wherein the step of selecting [[a]] the simple antenna configuration comprises selecting a motif.
- 12. (Original) The method of claim 1, wherein the simple antenna configuration is a Werner pattern.
- 13. (Original) The method of claim 1, further comprising performing an iterated process on the simple configuration to produce a fractal pattern to which the genetic algorithm is applied.

- 14. (Original) The method of claim 1, further comprising performing a semi-iterated process on the simple configuration to produce a semi-fractal pattern to which the genetic algorithm is applied.
- 15. (Currently Amended) The method of claim 1, wherein the step of applying [[a]] the genetic algorithm generates a configuration of an array of antennas.
- 16. (Currently Amended) The method of claim 1, wherein the step of applying [[a]] the genetic algorithm generates a configuration of elements for an individual antenna.
- 17. (Currently Amended) The method of claim 1, the steps of applying [[a]] the genetic algorithm generates a configuration of antennas within an array and configurations of elements of the individual antennas within the array.

Claim 18 is canceled.

19. (Currently Amended) The method of claim [[18]] 1, wherein the step of creating [[a]] the pattern for [[a]] the frequency selective surface comprises:

selecting a pattern for arranging electromagnetic materials on a substrate or a superstrate; and

applying [[a]] the genetic algorithm to the selected pattern to generate an optimized pattern of electromagnetic materials for forming a frequency selective surface on the substrate or superstrate.

20. (Currently Amended) A system for generating a configuration of elements for at least one antenna, comprising:

means for selecting a simple antenna configuration including at least one antenna element; and

means for applying a genetic algorithm to the simple configuration to generate an antenna configuration optimized for antenna characteristics; and

means for creating a pattern for a frequency selective surface for improving radiation characteristics of the antenna.

21. (Currently Amended) The system of claim 20, further comprising:

means for analyzing radiation characteristics of the simple antenna configuration, wherein the radiation characteristics are used by the means for applying [[a]] the genetic algorithm to generate the antenna configuration optimized for antenna characteristics.

- 22. (Currently Amended) The system of claim 21, wherein the means for applying [[a]] the genetic algorithm generates candidate antenna configurations, and the means for analyzing radiation characteristics analyzes radiation characteristics of the candidate antenna configurations until the means for applying a genetic algorithm generates an optimal antenna configuration.
- 23. (Original) The system of claim 20, wherein the antenna characteristics include at least one of a voltage standing wave ratio, gain, size, bandwidth, radiation pattern, and impedance.
- 24. (Currently Amended) The system of claim 20, wherein the means for applying [[a]] the genetic algorithm optimizes at least one of geometry of elements, height of the antenna above the ground plane, and length of the antenna.
- 25. (Currently Amended) The system of claim 20, wherein the further comprising means for applying [[a]] the genetic algorithm for generating generates at least one of optimized load placement and optimized load values for the antenna configuration.

- 26. (Currently Amended) The system of claim 20, wherein the further comprising means for applying [[a]] the genetic algorithm to generate generates optimized design parameters for a matching network or balun to be connected to the antenna.
- 27. (Currently Amended) The system of claim 20, wherein the means for selecting [[a]] the simple antenna configuration randomly selects antenna elements.
- 28. (Original) The system of claim 27, further comprising means for selecting elements that connect to the randomly selected elements to produce a stochastic configuration to which the genetic algorithm is applied.
- 29. (Currently Amended) The system of claim 20, wherein the means for applying [[a]] the genetic algorithm optimizes each element of the antenna configuration independently.
- 30. (Original) The system of claim 20, wherein the simple configuration selected is a motif.
- 31. (Original) The system of claim 20, wherein the simple configuration selected is a Werner pattern.
- 32. (Original) The system of claim 20, further comprising means for performing an iterated process on the simple configuration to produce a fractal pattern to which the genetic algorithm is applied.
- 33. (Original) The system of claim 20, further comprising means for performing a semiiterated process on the simple configuration to produce a semi-fractal pattern to which the genetic algorithm is applied.
- 34. (Original) The system of claim 20, wherein the configuration of elements generated is a configuration of an array of antennas.

- 35. (Original) The system of claim 20, wherein configurations of elements for individual antennas are generated.
- 36. (Original) The system of claim 20, wherein configurations of elements for individual antennas are generated, and a configuration of the antennas within an array are generated.

Claim 37 is canceled.

38. (Currently Amended) The system of claim [[37]] 20, wherein the means for creating a pattern for a frequency selective surface comprises:

means for selecting a pattern for arranging electromagnetic materials on a substrate or a superstrate; and

means for applying a genetic algorithm to the selected pattern to generate an optimized pattern of electromagnetic materials for forming a frequency selective surface on the substrate or superstrate.

39. (Original) A method for creating a pattern of electromagnetic materials on a substrate or superstrate for forming at least one frequency selective surface, comprising:

selecting a pattern for arranging the electromagnetic materials on the substrate or the superstrate;

applying a genetic algorithm to the selected pattern to generate an optimized pattern of electromagnetic materials for forming a frequency selective surface on the substrate or superstrate.

40. (Currently Amended) The method of claim 39, wherein the step of applying [[a]] the genetic algorithm comprises modifying a geometry of the pattern.

- 41. (Currently Amended) The method of claim 40, wherein the step of applying [[a]] the genetic algorithm also applies a genetic algorithm to characteristics of the substrate or superstrate to optimize these characteristics.
- 42. (Original) The method of claim 41, wherein the characteristics of the substrate or superstrate that are optimized include at least one of a thickness and a dielectric constant of the substrate or superstrate.
- 43. (Original) The method of claim 39, wherein the frequency selective surface includes a combination of frequency selective cells forming a screen.
- 44. (Original) The method of claim 43, wherein patterns for multiple screens and dielectric layers are produced by the method.
- 45. (Original) The method of claim 44, wherein the genetic algorithm is applied to generate an optimized stack of multiple screens and dielectric layers.
- 46. (Original) The method of claim 39, wherein the frequency selective surface is a high impedance, single band or multiband surface.
- 47. (Original) The method of claim 39, wherein the frequency selective surface forms a high impedance ground plane for a single band or multiband antenna.
- 48. (Original) The method of claim 39, wherein the frequency selective surface is part of a shield for shielding radio frequency energy emitted by an antenna.
- 49. (Original) The method of claim 39, wherein the frequency selective surface contains adjustable components enabling a frequency response of the frequency selective surface to be adjusted.

50. (Original) A system for creating a pattern of electromagnetic materials on a substrate or superstrate for forming at least one frequency selective surface, comprising:

means for selecting a pattern for arranging the electromagnetic materials on the substrate or superstrate; and

means for applying a genetic algorithm to the selected pattern to generate an optimized pattern of electromagnetic materials for forming a frequency selective surface on the substrate or superstrate.

- 51. (Currently Amended) The system of claim 50, wherein the means for applying [[a]] the genetic algorithm comprises means for modifying a geometry of the pattern.
- 52. (Currently Amended) The system of claim 51, wherein the means for applying [[a]] the genetic algorithm also applies a genetic algorithm to characteristics of the substrate or superstrate to optimize these characteristics.
- 53. (Original) The system of claim 52, wherein the characteristics of the substrate or superstrate that are optimized include at least one of a thickness and a dielectric constant of the substrate or superstrate.
- 54. (Original) The system of claim 50, wherein the frequency selective surface includes a combination of frequency selective cells.
- 55. (Original) The system of claim 54, wherein patterns for multiple screens and dielectric layers are produced by the apparatus.
- 56. (Original) The system of claim 55, wherein the genetic algorithm is applied to generate an optimized stack of multiple screens and dielectric layers.

- 57. (Original) The system of claim 50, wherein the frequency selective surface is a high impedance, single band or multiband surface.
- 58. (Original) The system of claim 50, wherein the frequency selective surface forms a high impedance ground plane for a single band or multiband antenna.
- 59. (Original) The system of claim 50, wherein the frequency selective surface is part of a shield for shielding radio frequency energy emitted by an antenna.
- 60. (Original) The system of claim 50, wherein the frequency selective surface contains adjustable components enabling a frequency response of the frequency selective surface to be adjusted.
- 61. (New) A method for generating a configuration of elements for at least one antenna, comprising the steps of:

selecting a simple antenna configuration including at least one antenna element; applying a genetic algorithm to the simple configuration to generate an antenna configuration optimized for antenna characteristics; and

applying a genetic algorithm to generate optimized design parameters of a matching network or balun to be connected to the antenna.

62. (New) A method for generating a configuration of elements for at least one antenna, comprising the steps of:

selecting a simple antenna configuration including at least one antenna element, wherein the step of selecting a simple antenna configuration comprises selecting a motif.; and applying a genetic algorithm to the simple configuration to generate an antenna configuration optimized for antenna characteristics

63. (New) A method for generating a configuration of elements for at least one antenna, comprising the steps of:

selecting a simple antenna configuration including at least one antenna element, wherein the simple antenna configuration is a Werner pattern; and

applying a genetic algorithm to the simple configuration to generate an antenna configuration optimized for antenna characteristics.

64. (New) A method for generating a configuration of elements for at least one antenna, comprising the steps of:

selecting a simple antenna configuration including at least one antenna element; applying a genetic algorithm to the simple configuration to generate an antenna configuration optimized for antenna characteristics; and

performing an iterated process on the simple configuration to produce a fractal pattern to which the genetic algorithm is applied.

65. (New) A method for generating a configuration of elements for at least one antenna, comprising the steps of:

selecting a simple antenna configuration including at least one antenna element; applying a genetic algorithm to the simple configuration to generate an antenna configuration optimized for antenna characteristics; and

performing a semi-iterated process on the simple configuration to produce a semifractal pattern to which the genetic algorithm is applied.

66. (New) A method for generating a configuration of elements for at least one antenna, comprising the steps of:

selecting a simple antenna configuration including at least one antenna element; applying a genetic algorithm to the simple configuration to generate an antenna configuration optimized for antenna characteristics, wherein the step of applying a genetic algorithm generates a configuration of an array of antennas.

11

67. (New) A method for generating a configuration of elements for at least one antenna, comprising the steps of:

selecting a simple antenna configuration including at least one antenna element; applying a genetic algorithm to the simple configuration to generate an antenna configuration optimized for antenna characteristics, wherein the step of applying a genetic algorithm generates a configuration of antennas within an array and configurations of elements of the individual antennas within the array.

68. (New) A system for generating a configuration of elements for at least one antenna, comprising:

means for selecting a simple antenna configuration including at least one antenna element, wherein the simple configuration selected is a Werner pattern; and

means for applying a genetic algorithm to the simple configuration to generate an antenna configuration optimized for antenna characteristics.

69. (New) A system for generating a configuration of elements for at least one antenna, comprising:

means for selecting a simple antenna configuration including at least one antenna element;

means for applying a genetic algorithm to the simple configuration to generate an antenna configuration optimized for antenna characteristics; and

means for performing an iterated process on the simple configuration to produce a fractal pattern to which the genetic algorithm is applied.

70. (New) A system for generating a configuration of elements for at least one antenna, comprising:

means for selecting a simple antenna configuration including at least one antenna element;

means for applying a genetic algorithm to the simple configuration to generate an antenna configuration optimized for antenna characteristics; and

means for performing a semi-iterated process on the simple configuration to produce a semi-fractal pattern to which the genetic algorithm is applied.

71. (New) A system for generating a configuration of elements for at least one antenna, comprising:

means for selecting a simple antenna configuration including at least one antenna element; and

means for applying a genetic algorithm to the simple configuration to generate an antenna configuration optimized for antenna characteristics, wherein the configuration of elements generated is a configuration of an array of antennas.

72. (New) A system for generating a configuration of elements for at least one antenna, comprising:

means for selecting a simple antenna configuration including at least one antenna element; and

means for applying a genetic algorithm to the simple configuration to generate an antenna configuration optimized for antenna characteristics, wherein configurations of elements for individual antennas are generated.

73. (New) A system for generating a configuration of elements for at least one antenna, comprising:

means for selecting a simple antenna configuration including at least one antenna element; and

means for applying a genetic algorithm to the simple configuration to generate an antenna configuration optimized for antenna characteristics, wherein configurations of elements for individual antennas are generated, and a configuration of the antennas within an array are generated.

#### REMARKS

Claims 1-17, 19-36 and 38-73 are pending. Claims 1, 3, 5-8, 10, 11, 15-17, 20-22, 24-27, 29, 38, 40, 41, 51, and 52 have been amended in this response. Claims 18 and 37 have been cancelled without prejudice, waiver, or disclaimer. New claims 61-73 have been added. No new matter is believed to be added by these amendments and new claims. In addition, unless a passage of an amendment is specifically discussed below in connection with one or more cited references, Applicants respectfully submit that the amendments to the claims should be constructed as being submitted merely to clarify the invention rather than as a limitation submitted to overcome a cited reference.

#### A. <u>Claim Objections</u>

The Examiner objected to Claims 3, 5, 8, 11, 15-17, 19, 22, 24-27, 29, 40, 41, 51 and 52 to typographically incorrect antecedent errors. In response, Applicants have amended the subject claims to correct the antecedent errors. Thus, as amended, Claims 3, 5, 8, 11, 15-17, 19, 22, 24-27, 29, 40, 41, 51 and 52 should be in condition for allowance.

#### B. Claim Rejections under 35 USC §112

The Examiner rejected Claims 6, 7, 25 and 26 are being indefinite. In response, Applicants have amended the subject claims to note that the step of applying the genetic algorithm is defined in the respective dependent claims parent independent claim. As amended, Claims 6, 7, 25 and 26 read as follows:

- 6. The method of claim 1, wherein the step of applying the genetic algorithm generates at least one of optimized load placement and optimized load values for the antenna configuration.
- 7. The method of claim 1, wherein the step of applying the genetic algorithm generates optimized design parameters of a matching network or balun to be connected to the antenna.
- 25. The system of claim 20, wherein the means for applying the genetic algorithm generates at least one of optimized load placement and optimized load values for the antenna configuration.

26. The system of claim 20, wherein the means for applying the genetic algorithm generates optimized design parameters for a matching network or balun to be connected to the antenna.

As currently amended, Claims 6, 7, 25 and 26 should be condition for allowance.

#### C. Allowable Subject Matter

Applicants thank the Examiner for the indicated allowability of Claims 39-60 and the indicated allowability of dependent Claims 7, 11-15, 17-19 and 31-38. Accordingly, Applicants have amended independent Claim 1 to include the subject matter of allowable Claim 18. Applicants have amended independent Claim 20 to include the subject matter of allowable Claim 37. Therefore, currently amended independent Claims 1 and 20 and the dependent claims that depend therefrom are in condition for allowance.

#### D. <u>New Claims</u>

Applicants have added new claims 61-73. New independent claim 61 includes the subject matter of allowable Claim 7 and the base claim 1. Further, new independent claim 62 includes the subject matter of allowable Claim 11 and the base claim 1. Also, new independent claim 63 includes the subject matter of allowable Claim 12 and the base claim 1. Next, new independent claim 64 includes the subject matter of allowable Claim 13 and the base claim 1. Also, new independent claim 65 includes the subject matter of allowable Claim 14 and the base claim 1. New independent claim 66 includes the subject matter of allowable Claim 15 and the base claim 1. New independent claim 67 includes the subject matter of allowable Claim 17 and the base claim 1.

Further, new independent Claim 68 includes the subject matter of allowable Claim 31 and the base claim 20. Also, new independent Claim 69 includes the subject matter of allowable Claim 32 and the base claim 20. Next, new independent Claim 70 includes the subject matter of allowable Claim 33 and the base claim 20. In addition, new independent Claim 71 includes the subject matter of allowable Claim 34 and the base claim 20. Still

further, new independent Claim 72 includes the subject matter of allowable Claim 35 and the base claim 20. Also, new independent Claim 73 includes the subject matter of allowable Claim 36 and the base claim 20. Thus, new independent claims 61-73 should be in condition for allowance.

Therefore, Applicants respectively request allowance of all the outstanding claims. The Examiner is invited and encouraged to contact directly the undersigned if such contact may enhance the efficient prosecution of this application to issue.

Credit Card Authorization form PTO-2038 in the amount of \$3,620.00 (for a three-month extension of time (\$1,020.00) and for thirteen new independent claims (\$2,600.00)) is enclosed. No additional fees are believed to be due; however, the Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 14-0629.

Respectfully submitted,

Kean (J. DeCarlo

Registration No. 39,956

6/29/2000

NEEDLE & ROSENBERG, PC Customer Number 23859 (678) 420-9300 (678) 420-9301 Facsimile

CERTIFICATE	OF	MAIL	ING

I hereby certify that this correspondence and the documents mentioned therein are being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on June 29, 2006.

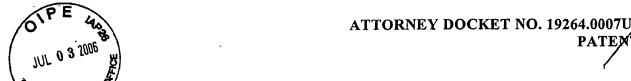
VA 22515-1450, 011 5411025, 2000

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Kean J. BeCar

IEN 2821



In re Application of		)		
Werner, et al.	•	)	Group Art Unit:	2821
Serial No.:	10/072,739	)	Examiner:	Ho, Tan
Filed:	February 8, 2002	)	Confirmation No.	2986
For:	"System and Method for Generating a Genetically Engineered Configuration for At Least One Antenna and/or Frequency Selective Surface"	) ) ) )		

THE UNITED STATES PATENT AND TRADEMARK OFFICE

#### REQUEST FOR EXTENSION OF TIME

MAIL STOP AMENDMENT Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 NEEDLE & ROSENBERG, P.C.

Customer Number 23859

June 29, 2006

Sir:

It is respectfully requested that an extension of time for the period indicated below be granted in accordance with the provisions of 37 C.F.R. Section 1.136 to take action required in the application identified in the caption, as reflected by the papers submitted herewith:

	One Month	\$120.00	(\$ 60.00)*
	Two Months	\$450.00	(\$225.00)*
$\boxtimes$	Three Months	\$1,020.00	(\$510.00)*
	Four Months	\$1,590.00	(\$795.00)*
	Five Months	\$2,160.00	(\$1,080.00)*

<sup>\*</sup> Small Entity

07/06/2006 FMETEKI1 00000067 10072739

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1020.00 OP

## ATTORNEY DOCKET NO. 19264.0007U2 PATENT

A Credit Card Payment Form PTO-2038 authorizing payment in the amount of \$1,020.00 is enclosed for a Request for a three-month Extension of Time for a large entity. This amount is believed to be correct; however, the Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 14-0629.

Respectfully submitted,

NEEDLE & ROSENBERG, P.C.

Kean J DeCarlo

Registration No. 39,956

NEEDLE & ROSENBERG, P.C. Customer Number 23859 (678) 420-9300 (678) 420-9301 Facsimile

#### CERTIFICATE OF MAILING

I hereby certify that this correspondence and the documents mentioned therein are being deposited with the United States Postal Service in an envelope addressed to: MAIL STOP AMENDMENT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA. 22315 1450, op June 29, 2006.

Kean J. BeCarlo

Date

RECEIVED IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

MAIL STOP AMENDMENT Commissioner for Patents P.O. Box 1450

Alexandria, Virginia 22313-1450

JUL 1 4 2006

JUL 0 3 2006

NEEDLE & ROSENBERG

SIR: PLEASE ACKNOWLEDGE RECEIPT OF THE FOLLOWING:

X Amendment (16 pages)

X Request for Three Month Extension of Time (2 pages)

X Credit Card Payment Form PTO-2038 authorizing payment in the amount of \$3,620.00 (1 page)

X Certificate of Mailing dated June 29, 2006

In RE Application of: Werner, et al.

Title: "System and Method for Generating a Genetically Engineered Configuration of the Config

for at Least One Antenna and/or Frequency Selective Surface"

Application No. 10/072,739

Reference No. 19264.0007U2

Filed: February 8, 2002

Attorney/Secretary KJDsad